

The colourful Gaillardia 'Goblin' flowers, RBG Kew

Google Arts & Culture

Explore the Botanic World of Gardens

Lesson plan
created with



**TABLET
ACADEMY**

Introduction

Explore the Botanic World of Gardens

Join us as we explore the world of gardens and their impact on humans, the landscape, and on science.

This lesson plan is designed to support you as you explore Google Arts & Culture stories related to the lesson topic. This lesson is suitable for anyone, but is recommended for students aged 8-12 years.

You can complete the lesson on your own working at home, with a group of friends, or in your classroom. They are designed so that you can work through them at a pace that suits you.

If you get stuck, you can talk to a teacher or parent.

Throughout the lesson you will find tasks to complete and questions to answer, so when you reach the end, you will have used a range of skills to create something on your own that demonstrates your knowledge and understanding of the subject.

All you need to get started is any device with internet access.

In this lesson, discover more about gardens and landscapes that have been created specifically to showcase nature in all its forms.

Things you'll need to complete this lesson.



Tablet, laptop or computer with access to the internet.



Paper, or a notebook, and pen to make notes as you go.



Drawing materials, such as coloring pens and pencils, paper etc.



Scissors, glue, scrap paper and general stationery items.



Art materials, specifically paints and brushes.



A printer would be beneficial but not necessary – why not draw instead?

Explore & Discover

Explore the Botanic World of Gardens

What can you expect to learn?

Gardens are a source of inspiration, comfort and enjoyment for lots of people, and can be beneficial to mental health and wellbeing. In this lesson, discover how gardens are created and maintained, from the Eden Project in Cornwall to the Royal garden at Balmoral in Scotland. Learn how gardens are used for scientific research, and how they are a barometer for climate change.

Activities to complete

1. Grow your own cress heads.
2. Consider the items needed to create a pollinator garden.
3. Create a piece of writing describing a garden scene.
4. Design a garden for your local community, or your own garden.
5. Write a poem describing a green space or plant near where you are.

Outcomes you will achieve

- Discover how people use gardens to counter loneliness and other health issues.
- Learn how gardening styles have developed over time.
- Explore a variety of gardens and landscapes around the United Kingdom.
- Appreciate the efforts made by gardeners to make their gardens more insect and eco-friendly.
- Learn how gardens have inspired people to be creative.

Look out for the following tips which tell you what to do during the lesson.



Key information to remember and to help guide you through the lesson.



Estimated time to complete a section or activity within the lesson.



Optional headphones to listen to videos and audio recordings.



Explore online content. Discover videos, stories, and zoom into pictures.



Activity - time to design, make or write something of your own.



Vocabulary

Words to look out for in the lesson

acidic, acre, ancestral, aromatherapy, arboretum, biome, border, botanic, bulb, butterfly, caterpillar, commission, communal, community space, conservatory, coppice, daffodil, design, ecosystem, estate, glasshouse, green oasis, green spaces, habitat, ha-ha, head gardener, herbaceous, horticultural, immersive, Italianate, landscape, medicinal, mental health, mindful, moth, oil painting, organic, outdoor space, pandemic, parkland, patronage, pest control, physical, plant, plant pot, plot, poetry, pollinator, pond, psychological, refuge, rose, seasonal, seed, seedling, sensory, social isolation, soil, stimulus, topiary, tree, vista, watercolor, wellbeing



Explore the Botanic World of Gardens

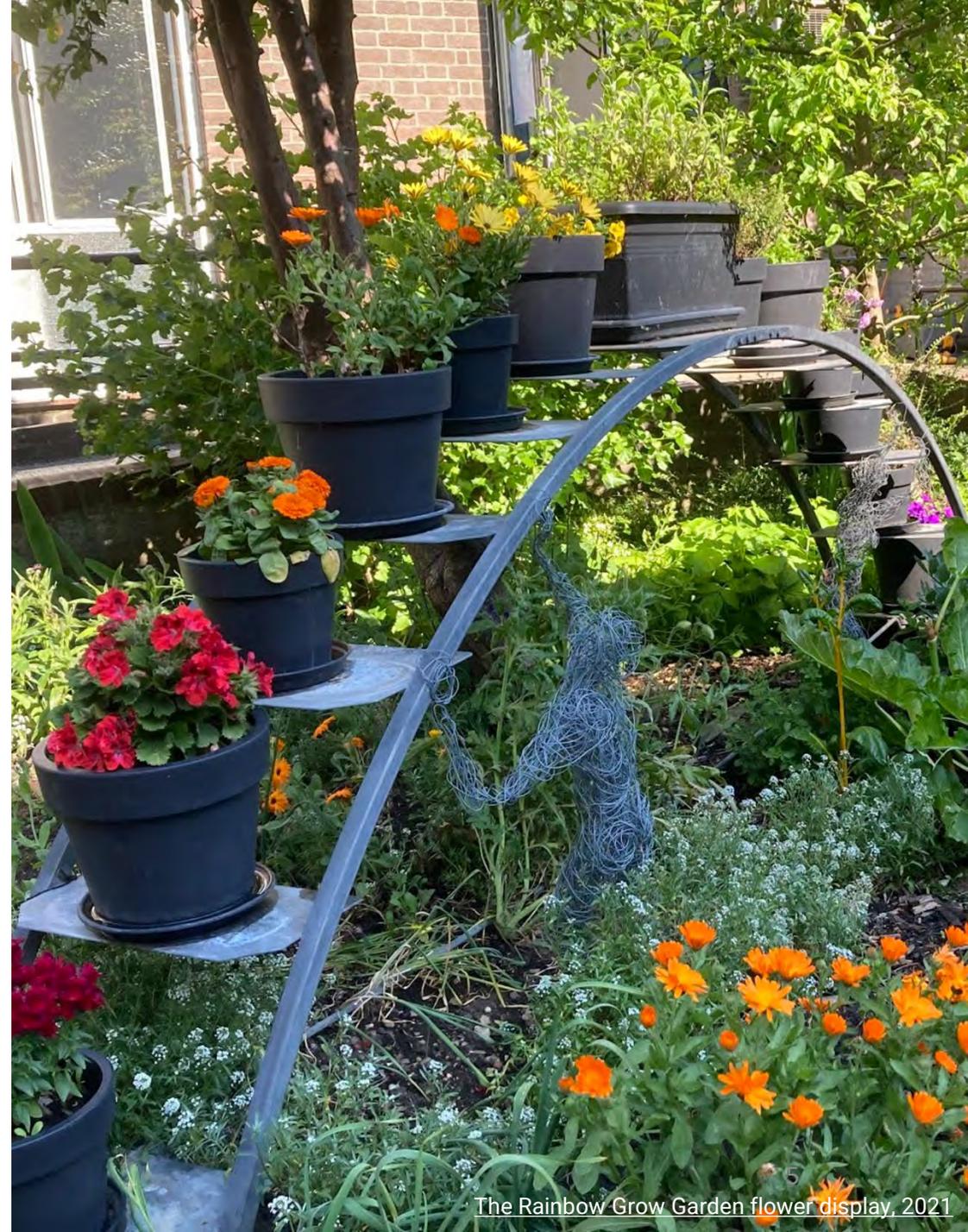
Introduction

Gardens help shape the landscape and are a sources of inspiration, comfort, and enjoyment for many people. They can be used to help people live with or counter mental health and other medical conditions, and can be a haven of green space in crowded spaces like cities.

In this lesson, you will learn how gardens are helping people feel better about themselves. You will discover how gardens are created and maintained, from the Eden Project in Cornwall to the Royal garden at Balmoral in Scotland, as well as explore the history of gardening.



If you make notes on the stories you read, this will help you for the end of lesson quiz.



The Rainbow Grow Garden flower display, 2021



[Marianne North Gallery, RBG Kew](#)

What is this lesson about?

In this lesson, we will explore how gardens have helped shape the landscape and discover how they are created and maintained. To do this, you will explore green spaces in your local area, as well as taking a virtual tour around some of the impressive gardens and landscapes to be found in the United Kingdom. We will also look at how gardens are helping people feel better about themselves, and you will get the chance to grow your own cress.



This lesson will take around 120 minutes.



[Dr Chris Thorogood 2020](#)
[From the collection of Oxford Botanic Garden and Arboretum](#)

Gardens for Healing

Gardens support our health, happiness and communities. You will learn how gardens are helping people feel better about themselves and experience for yourself the benefits by exploring a green space in your local area.



[Comma butterfly by Will Langdon, Will Langdon and Butterfly Conservation, 2015/2020, Butterfly Conservation East Lulworth](#)

Nature for Wellbeing

Learn how interacting with the amazing life in your garden or local green space can do wonders for your mental health.



[The Gentlemen Gardeners, 2021-01-05, The Alnwick Garden](#)

Community Gardens

Learn how gardens can create a sense of belonging, combat loneliness, and bring communities together to learn and share new skills.



[Rosemary Medicinal](#)
[From the collection of Ventnor Botanic Garden](#)

Medicinal Gardens

Ethnobotany is the study of the interrelationship between people and plants. Learn about the renewed efforts being put into the study of ethnobotany, in particular the medicinal properties of some plants.



[Japanese maple, *Acer japonicum*, 2018, Oxford Botanic Garden and Arboretum](#)

Gardens for Wellbeing

Learn how gardens make healthier, happier spaces.



This chapter will take around 45 minutes.



Green spaces, including gardens, offer a place of sanctuary and healing. A study by the University of Exeter and the Royal Horticultural Society found that people who spend time in a domestic garden are significantly more likely to report general good health, better psychological wellbeing, and greater physical activity levels than those who do not.

[Explore](#)



Activity 1

Describe A Garden Experience



Explore a green space such as a garden, local public park, or school grounds, and describe your experience.



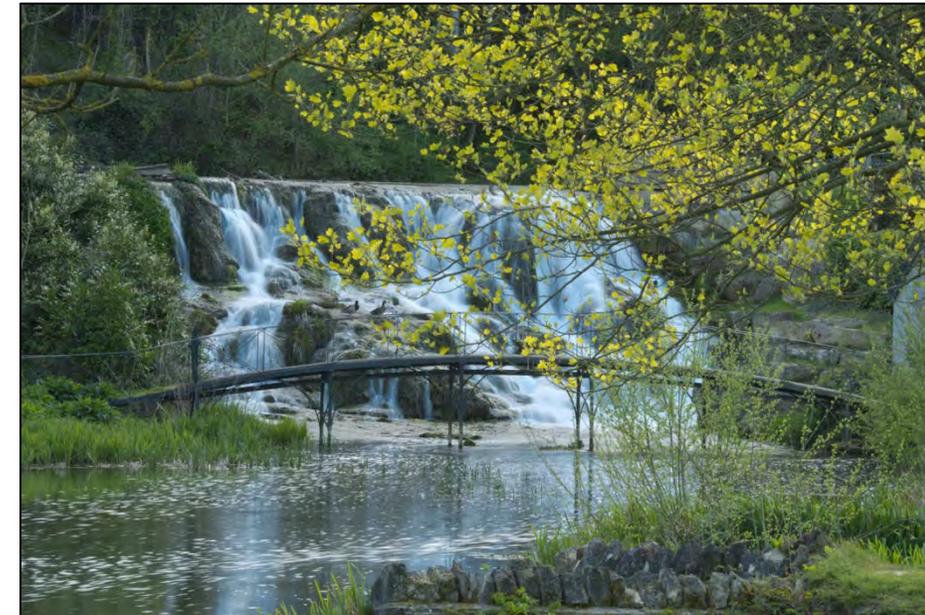
Things to consider when writing about your experience:

- What did you see?
- What did you hear?
- How did it make you feel?
- What was your favorite thing?
- What three words would you use to describe your experience?

How much you write is up to you, but the time guide below indicates how long you should spend on this activity. Of course, you are welcome to spend longer if this activity inspires you.



You may need help from your parents or teacher with this activity



[Grand Cascades, Blenheim Palace Woodstock](#)





Research suggests that spending time with nature can have positive benefits for mental health and wellbeing including reducing stress, anxiety, and blood pressure. So, by doing good for nature, you can reap the rewards for yourself.

[Explore](#)





You may need help from your parents or teacher with this activity



Activity 2

Minibeast Hunt



A minibeast hunt is a fun way to get up close to nature. Find a green space such as a garden, local public park, or school grounds, and make notes about what you find on your minibeast hunt:

- What types of minibeasts did you find?
- How many minibeast did you find?
- What was the most common minibeast you found?
- Where did you find the most minibeasts?
- Where did you find the least amount of minibeasts?

Remember: Minibeasts are very fragile so you should only observe them, not disturb them.



Extra Challenge

Using a camera, tablet or mobile device and take some photos of the minibeasts you find. Or make a sketch.

Things you might find on your minibeast hunt:



Things that you might find in your garden, Tablet Academy, August 2021





By providing open spaces to connect people, gardens can enrich the lives of people with mental or physical disabilities. Spaces created for recreation, exercise, wellbeing and education, offer a wide range of benefits and can be an immensely valuable resource for local communities.

Explore



Activity 3

Design A Community Garden



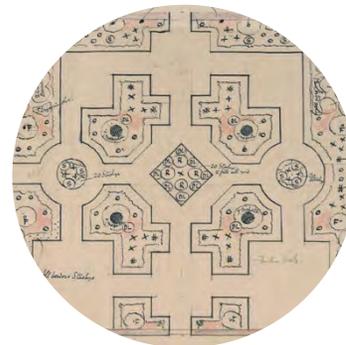
Design a garden for your local community. You can sketch your garden design on paper or use a computer. Your garden design must be no bigger than five square meters.



You may need help from your parents or teacher with this activity

Things to consider when designing your community garden:

- What is the purpose of your community garden?
- What plants / flowers will you have in your garden?
- How will you make your garden accessible?
- How will you attract pollinators, such as bees and butterflies, to your garden?
- Where will you store your gardening tools?
- What sustainable features will you include in your design?



[Coloured plan by Gertrude Jekyll: Hestercombe Wall facing East; with borders & rill on higher level \[West Rill & West Plat Border\] nd \[c. 1906\], 1906/1907, Hestercombe House & Gardens](#)



[The Bee Borders, 2009-05-22, Cambridge University Botanic Garden](#)



20 to 30-minute activity



Medicinal plants, also known as medicinal herbs, have been used as traditional medicines since prehistoric times.

Thanks to the work being carried out at the Ventnor Botanic Garden on the Isle of Wight, the potential of the plant kingdom to provide us with cures for many of the worst diseases we know is now being realised.

[Explore](#)



Activity 4

Growing Your Own Cress



Cress is a plant with small green leaves that is used in salads, or to decorate food. Cress is also an excellent source of vitamin-A. Having cress in the diet has been found to prevent osteoporosis, anaemia, and vitamin-A deficiency.

Directions:

1. Dip a cotton wool ball in a small amount of water.
2. Squeeze off any excess water.
3. Place the cotton wool ball inside an eggshell, eggbox, or egg cup.
4. Sprinkle one teaspoon of cress seeds onto the cotton wool ball.
5. Leave in a dry, well-lit place for a week. For example, on a windowsill.
6. Decorate your eggshell / eggbox.

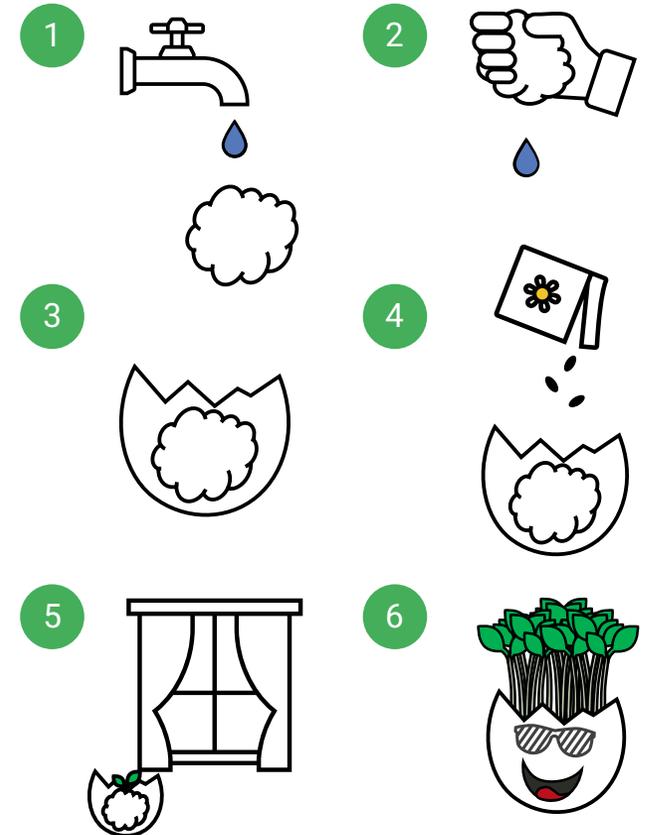
Your cress will start to grow within a few days.

You will need:

- Water
- Cress seeds
- Cotton wool
- Eggs, egg box or egg cup
- Colored pens or pencils



You may need help from your parents or teacher with this activity



How to grow cress, Simon Johnson, August 2021



20 to 30-minute activity



[Wimpole Hall, Wimpole, Cambridgeshire, Anna Bridson, 2016-10-03, Historic England](#)

Creating Gardens

Discover the history, science and culture of gardens.



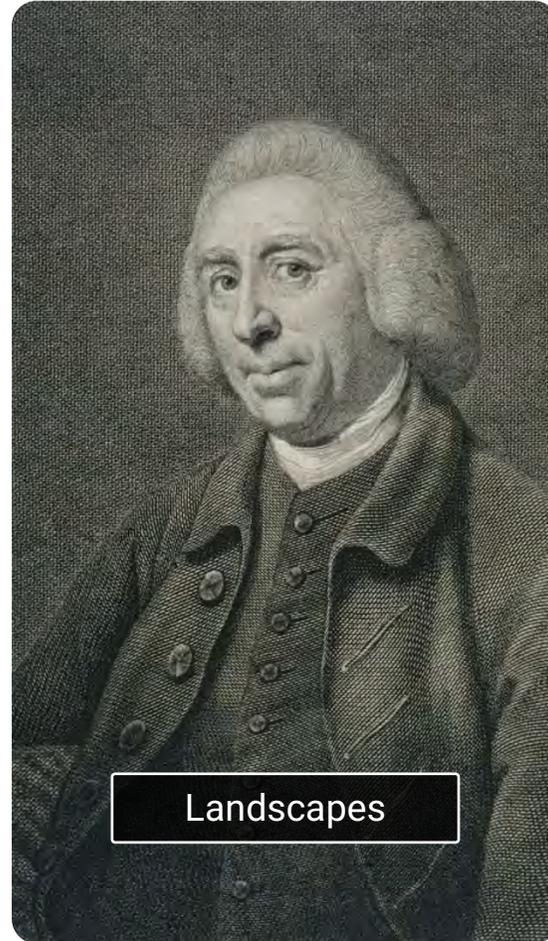
This chapter will take around 45 minutes.

Gardens: the People, History and Science



History

[Miniature of John Tradescant the Younger, After Thomas De Critz, 1660s, Garden Museum](#)



Landscapes

[Portrait of Lancelot 'Capability' Brown Nathaniel Dance-Holland, John Keyse Sherwin, c1780, Historic Royal Palaces](#)



Royalty

[Queen Victoria posing outside with her dog Sharp, probably at Balmoral Castle.](#)



Biome

[Citrons, Mediterranean Biome, Eden Project, 2020, Eden Project](#)



The East Parterre at Hatfield House, Hatfield, Hertfordshire, Unknown
photographer, 1910/1930, Historic England

The Tradescants

They introduced a lot of new plants to Britain

The Tradescants were a seventeenth century family of plant hunters, gardeners, and collectors of curiosities who introduced many new plants to Britain.

They worked on some of the greatest gardens of their day and opened the first public museum in the country.



'Capability' Brown

Landscaping Britain

Lancelot 'Capability' Brown was England's leading, and most influential, landscape designer of the mid- to late eighteenth century.

Between 1750 and 1760, Brown had undertaken over forty large commissions. His reputation was such that he became known by his nickname 'Capability'. This stemmed from his ability to realize the capabilities, or possibilities, of the landscapes he worked with.

Brown's signature features included gently rolling parkland, groups of trees, ha-has, ornamental walks and sinuous lakes, all formed in a seamless fashion, and which took into account the working needs of an estate.

During his career, Brown worked on well over two hundred estates.





Royal Gardens

Learn more about the gardens at Balmoral

Set against the backdrop of Scotland's Cairngorm National Park, Balmoral and its gardens have been the Scottish home of the British Royal Family since it was purchased for Queen Victoria by Prince Albert in 1852, having been first leased in 1848.

The gardens which were created under the supervision of Prince Albert, have been expanded and improved over the years by successive members of the Royal Family.

The formal gardens, covering over three acres of land, contain a wide variety of plants and flowers - all designed to be in full flower between August and October when the Royal Family are in residence for their summer vacations.



Explore



Because plants can't move (much) they reproduce by luring insects, and sometimes other animals, to take their pollen from flower to flower. They use color, scent, shape and the sweet reward of pollen and nectar, to do this.

[Explore](#)



You may need help from your parents or teacher with this activity



Activity 5

Creating a Pollinator Garden



We can all lead more healthy lives by embracing nature in several ways. One method is to increase the number of pollinators in your green space, or garden, by carrying out pollinator-friendly gardening.

Reflect on what you have learned about pollinators. Think about a garden or patch of green space near where you live; how could you design a pollinator garden for that area?

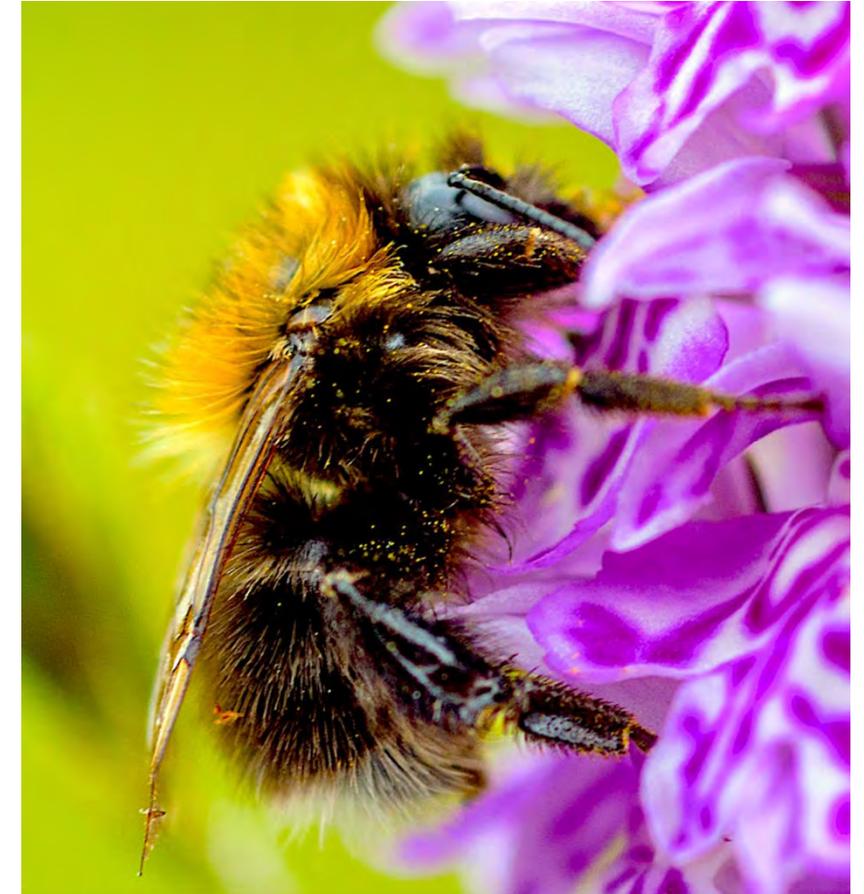
Make notes about the following points, research further if you need to:

- What do plants use to attract pollinators?
- What types of plant would you want to have?
- What sort of nesting sites would you need?
- What would you do with the grass?
- How would you provide water?
- What would you do about pesticides?



Extra Challenge

Use what you have learned to make your community garden (see activity 3) more attractive to pollinators.



[Studying bees at Kew and Wakehurst, RBG Kew](#)



10 to 15-minute activity

Mediterranean Biome

The Eden Project, Cornwall

Built in 2001, the Eden Project turned a disused Cornish claypit into a temperature-controlled environment for an entire rainforest.

Housed inside a huge geodesic dome, the Mediterranean Biome is home to over 1,300 different species and cultivars of plant. The plants originate from the Mediterranean Basin and other places in the world with a similar warm temperate climate – South Africa, California and Western Australia. These regions tend to have hot, dry summers and cool, wet winters.





[The South West end of the garden at Plas Brondanw, Plas Brondanw, 2020-07, Historic Houses](#)

Gardens as Inspiration

Learn about how gardens have inspired creativity in architecture, poetry, and painting.



This chapter will take around 30 minutes.



[Portmeirion Village, North Wales](#)
[Portmeirion, 2020-07, Historic Houses](#)

An Architect's Dream

Explore the gardens at Plas Brondanw in Wales, thought to be amongst some of the finest examples of creative landscape design.



[Polyanthus flowers growing between lines of hazel trees in the Nuttery at Sissinghurst Castle, Cranbrook, Kent, John Gay, 1955/1959, Historic England](#)

Creating Sissinghurst

Explore the wondrous gardens of Sissinghurst Castle near Cranbrook, in Kent.



[trumpet daffodil, The New York Botanical Garden](#)

“I Wandered Lonely as a Cloud”

Learn the story behind the creation of William Wordsworth's most famous poem, also known as 'Daffodils'.



[Marianne North Gallery, RBG Kew](#)

A Victorian Biologist

Discover some of the 800+ stunning pieces of art that cover the walls of the Marianne North Gallery at Royal Botanic Gardens in Kew, London.



Plas Brondanw is typical of the houses lived in by the Welsh gentry in the seventeenth century. It is the ancestral home of the Williams-Ellis family of Glasfryn but we know it today for its Italian Renaissance inspired gardens.

*audio is in the Welsh language.

[Explore](#)



The garden at Sissinghurst Castle is one of the most iconic gardens in England. It was created by the poet and writer Vita Sackville-West and her husband the author and diplomat Harold Nicholson.

[Explore](#)



'I Wandered Lonely as a Cloud', commonly known as 'Daffodils', is a poem by the English romantic poet William Wordsworth. The poem was inspired by an event on 15 April 1802, in which Wordsworth and his sister Dorothy came across a long stretch of wild daffodils.

[Explore](#)



Activity 6

Garden Poetry



Locate a quiet green space, such as a garden or local public park.

Observe your surroundings paying particular attention to the plants and flowers that surround you. Once you feel relaxed, read the poem 'I wandered lonely as a cloud' by William Wordsworth out loud.

Imagine you are that cloud. Use your senses of smell, touch, hearing and sight to immerse yourself in your surroundings. Now, just like Wordsworth did all those years ago, write a poem about your experience.



You may need to print out the poem by taking a screenshot from this [link](#).



You may need help from your parents or teacher with this activity



[Wild Daffodils \(Narcissus pseudonarcissus\) Wordsworth Grasmere 2012](#)
From the collection of Wordsworth Grasmere



20 to 30-minute activity



More than 800 remarkable paintings cover the walls of the Marianne North Gallery, in Kew Gardens. But who was she and why did her art matter?

Explore



Activity 7

Patterns in Nature



Examine the following images ([image 1](#), [image 2](#), and [image 3](#)) and select your favorite.



Sketch out on a piece of paper what you see.

When studying your image, consider if there are any repeating patterns. Think about where you may have seen these patterns before and try to incorporate these patterns into your own designs.



Extra Challenge

Explore how numerical properties that exist in nature have influenced artist such as John Edmark:

[Blooms: An exhibition on mathematics, nature, and perception.](#)



You may need help from your parents or teacher with this activity



[Dahlias and verbena bonarensis in the Autumn Garden at Newby Hall, Newby Hall, 2020-09, Historic Houses](#)





Quiz

Fill in the Blanks

See if you can recall what you have learned from this lesson. How many blank words can you fill without going back through the pages.

1. Set against the backdrop of Scotland's Cairngorm National Park, and its gardens have been the Scottish home of the British Royal Family since 1852.
2. Spending time in nature, watching wildlife or even doing some gardening can have positive benefits for mental health and
3. Ethnobotany is the study of the interrelationship between and plants.
4. is the collective name given to animals which carry pollen from one flower to another.
5. Capability Brown lived in the 18th Century and is famous for creating
6. Poet and writer Vita Sackville-West created an iconic garden in England at
7. Built in 2001, the turned a disused Cornish claypit into a temperature-controlled environment for an entire rainforest.
8. The were plant hunters, gardeners and collectors of curiosities who introduced many new plants to Britain.
9. Marianne North was a Victorian botanist and painter. She created a gallery at which you can visit today.
10. Flowers use, scent, shape and the sweet reward of nectar to lure animals to take their pollen.



[arcade game: Computer Quiz Nutting Associates, 1968, The Strong National Museum of Play](#)





[Privy Garden, Hampton Court Palace, Richard Lea-Hair, 2019, Historic Royal Palaces](#)

Want to Learn More?



Now that you've completed this lesson, you may want to continue to find out more about a nation of gardens, [this](#) is a good place to start. If you want to try out some challenges, click [here](#).

Quiz Answers

End of Lesson Quiz

Here are the answers to the quiz. How did you do?

1. Balmoral
2. Wellbeing
3. People
4. Pollinator
5. Landscape gardens/landscapes
6. Sissinghurst
7. Eden Project
8. Tradescants
9. Royal Botanic Gardens Kew/Kew Gardens
10. Color

